

REMARKS

Claims 1-3, 5, 6, and 8 are all the claims pending in the application. By this Amendment, Applicant cancels claims 4 and 7 without prejudice or disclaimer.

The Examiner has rejected claim 1 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant submits amended claim 1.

The Examiner has made objections to claim 8 and the FIG. 5 for informalities. The Examiner essentially states that claim 8 and the figures are inconsistent because the drawings show “the reflection regions being set to be zero or a negative angle as viewed from the axis that is perpendicular to the optical axis.” To the contrary, Applicant submits that claim 8 does not have the alleged informality because the drawings correctly reflect what is recited in claim 8. Applicant believes that the Examiner mistakenly understood claim 8 as reciting a reflection region being set to be zero or a negative angle, when the claim 8 recites the reflection angle, not the reflection region, being set to be zero or a negative angle. This interpretation is consistent with the figures. As for FIG. 5, Applicant proposes to submit that the figure properly shows the reflection angles for each of the plurality of reflection regions being set to zero (reflection angle of 0° from segment surfaces 111, 112) or a negative angle (reflection angle of -5° from segment surface 121, for example).

Claims 6-8 are rejected under 35 U.S.C. § 102(b) as being anticipated by either English et al. (U.S. Patent No. 5,577,833) (“English”) or Nino (U.S. Patent No. 4,916,585) (“Nino I”). Claims 6-8 are rejected under 35 U.S.C. § 102(e) as being anticipated by either De Lamberterie (U.S. Patent No. 6,409,369) (“De Lamberterie”), Nino et al. (U.S. Patent No. 6,419,381) (“Nino

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II”), or Maeda et al. (U.S. Patent No. 6,493,096) (“Maeda”). Claims 1-5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over either De Lamberterie, Nino II, Maeda, English, or Nino I. Applicant submits the arguments below to traverse the prior art rejections.

Applicant’s invention relates to a method of determining the reflective surface of a reflector in a vehicle lamp, and a vehicle lamp. Specifically, exemplary embodiments of the invention provide a method in which light from a light source is utilized effectively as reflected light by determining a reflective surface that satisfies a light distribution condition. An outline of the reflective surface is segmented along a segmentation axis to produce a plurality of reflection regions to satisfy a light distribution condition.

The cited reference, English, discloses a headlamp reflector comprising a concave shell having a reflective surface, wherein the shell includes multiple vertical panels defining the reflective surface. Nino I discloses a headlight device comprising a reflective mirror having a reflective zone consisting of a plurality of reflective elements, and a light source.

In rejecting claim 6 under § 102(b), the Examiner basically states that each and every element of the claim is met by either English or Nino I. (Amended claim 6 recites that the “light source is installed such that a longitudinal direction of a shape of a light-emitting region thereof is approximately perpendicular to said optical axis and segmentation axis.”) Nowhere in English or Nino I is there any teaching of a light source with the particular orientation as recited in claim 6. Thus, Applicant submits that claim 6 is not anticipated by English or Nino I and to request the Examiner to withdraw his rejection of the claim.

As for claim 8, Applicant argues that claim 8, which depends from claim 6, is patentable at least for the reasons discussed above for claim 6.

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The Examiner has also rejected claims 6-8 under 102(e) as being anticipated by either De Lamberterie or Nino II or Maeda. De Lamberterie relates to a motor vehicle headlight provided for the lateral enhancement of a passing or dipped headlight beam. Nino II relates to a reflecting mirror for a vehicle headlamp, which provides a sufficient amount of light near a slant cutoff line in downward-beam light distribution, to improve visibility in the long-distance region and a medium-distance region. Maeda discloses a shape determining method for a reflective surface of a reflector in a vehicle lamp, a reflective surface which is a free-formed surface divided into an array pattern.

Applicant submits that claims 6 and 8 are patentable over the De Lamberterie or Nino II or Maeda for reasons similar to those presented above with regard to the § 102(b) rejections. Namely, Applicant submits that all the cited references fail to teach a vehicle lamp wherein the "light source is installed such that a longitudinal direction of a shape of a light-emitting region thereof is approximately perpendicular to said optical axis and segmentation axis."

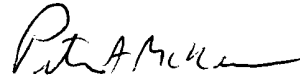
Claims 1-5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over either De Lamberterie or Nino II or Maeda or English or Nino I. Amended claim 1 recites that a longitudinal direction of a light source is approximately perpendicular to the optical axis in a basic condition setting step, and the segmentation axis is set to be approximately perpendicular to the optical axis and the longitudinal direction of the light-emitting region. Applicant submits that all the cited references under § 103(a) fail to teach or suggest the steps of orienting a longitudinal direction of a light source in the manner recited in claim 1, and at least for this reason do not render the method recited in claim 1 obvious. Claims 2, 3, and 5 are believed to be patentable at least by virtue of their dependency from claim 1.

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In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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